

EXHIBIT B

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner,

v.

SINGULAR COMPUTING LLC,
Patent Owner.

IPR2021-00155
Patent 10,416,961 B2

Before JUSTIN T. ARBES, KRISTI L. R. SAWERT, and
JASON M. REPKO, *Administrative Patent Judges*.

PER CURIAM.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

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A [person of ordinary skill in the art (“POSA”)] in 2009 would have had at least a bachelor’s degree in Electrical Engineering, Computer Engineering, Applied Mathematics, or the equivalent, and at least two years of academic or industry experience in computer architecture.

Pet. 9 (citing Goodin Decl.² ¶ 43).

Patent Owner does not address the level of ordinary skill in the art in its Preliminary Response. Based on the record presented, including our review of the ’961 patent and the types of problems and solutions described in the ’961 patent and cited prior art, we agree with Petitioner’s proposed definition of the level of ordinary skill in the art with one exception. Arguably, the term “at least” creates unnecessary ambiguity. Thus, we delete that term from Petitioner’s definition, and otherwise apply Petitioner’s definition for purposes of this Decision. *See, e.g.*, Ex. 1001 1:14–62 (describing in the “Background” section of the ’961 patent various conventional methods of computation and their alleged deficiencies).

B. Claim Construction

We need only construe terms that are in controversy and only to the extent necessary to resolve the controversy. *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017).

Petitioner states that the terms of the challenged claims should be “given their ordinary and customary meaning as understood by a [person of ordinary skill in the art] in accordance with the specification and prosecution history,” but does not propose any express interpretations. Pet. 9. Patent Owner disputes the construction of “low precision high dynamic range

² The declaration of Richard Goodin, P.E. (“Goodin Decl.”) is Exhibit 1003.

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(LPHDR) execution unit” that Petitioner proposed in the related district court case (i.e., “low precision and high dynamic range processing element designed to perform arithmetic operations on numerical values”), arguing that Dockser does not teach an LPHDR execution unit because “the processing element itself must be fairly characterized as ‘low precision’” and cannot be an execution unit “whose subprecision can be selectively reduced.” Prelim. Resp. 13–14 (citing Ex. 2001, 13–17) (emphasis omitted). We conclude that no terms require express interpretation at this time, and address the parties’ arguments regarding whether Dockser teaches the recited LPHDR execution unit below. *See infra* § II.C.

C. Obviousness over Dockser

Dockser discloses performing floating-point operations with a floating-point processor having selectable precision. Ex. 1007, code (57). Figure 1 of Dockser is reproduced below.